Remarks

In the present response, claim 1-17 are canceled, and claims 18-33 are newly added. Applicant believes that no new matter is entered.

I. Claim Objections

Claims 11-12, 14, and 16-17 are objected to because of informalities. This objection is moot since claims 1-17 are canceled.

II. Claim Rejections: 35 USC § 112

Claims 1-17 are rejected under 35 USC § 112, second paragraph, as being indefinite. This rejection is moot since claims 1-17 are canceled.

III. Claim Rejections: 35 USC § 102(e)

Claims 1-17 are rejected under 35 USC § 102(e) as being anticipated by Suzuki (USPN 6,625,511, hereinafter Suzuki). This rejection is moot since claims 1-17 are canceled.

IV. New Claims (18-33) Not Taught or Suggested by Suzuki

Applicant presents new claims 18-33. A proper rejection of a claim under 35 U.S.C. §102 requires that a single prior art reference disclose each element of the claim. See MPEP § 2131, also, *W.L. Gore & Assoc., Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 U.S.P.Q. 303, 313 (Fed. Cir. 1983). Since Suzuki neither teaches nor suggests each element in these new claims, claims 18-33 are allowable over Suzuki.

Suzuki is directed to predicting a failure in a workshop where real or actual record data is unavailable. Suzuki teaches:

> [T]he present invention makes it possible to estimate a failure occurrence likelihood (probable fraction defective or percent defective) in a workshop **even in the case where real record data concerning actual occurrence of defectives or failures is unavailable**. (Col. 8, lines 61-66, emphasis added).

This teaching in Suzuki is reinforced:

> In this way, by making use of the workshop evaluating unit 10a, the failure occurrence likelihood (real ability) of a given manufacturing workshop under evaluation can quantitatively be grasped **without need for manufacturing actually articles or products in the given manufacturing workshop**. (Col. 21, lines 10-15, emphasis added).

Claim 18 (Emphasis Added)

A method for predicting success/failure of a final product being processed along a manufacturing line, the method comprising:

processing a subassembly of the final product at different processing stages along the manufacturing line;

obtaining current process data during at least one processing stage that is before assembly of the final product, **the current process data including one of a measurement and a test performed on the subassembly at the at least one processing stage**;

obtaining historical process data from prior subassemblies being processed along the same manufacturing line as the subassembly, the historical process data being from the prior subassemblies while at the at least one processing stage; and

predicting, using both the historical process data and the current process data, success/failure of the subassembly if the subassembly is assembled to the final product, wherein predicting occurs before assembly of the final product.

Claim 18 recites numerous limitations that are not taught or suggested in Suzuki. For example, claim 18 recites that the current process data includes one of a measurement and a test performed on the subassembly at the processing stage. Further, the claim recites that historical process data is used. The historical process data is obtained from prior subassemblies processed "along the same manufacturing line as the subassembly." Predicting success/failure uses both the historical process data and the current process data. At least these limitations are not taught or suggested in Suzuki.

The dependent claims 19-24 contain numerous limitations not taught or suggested in Suzuki. For example, claim 22 recites predicting a failure for the subassembly and completing assembly of the subassembly into the final product "even after predicting the failure of the subassembly." These limitations are not taught or suggested in Suzuki.

As another example, claim 23 further recites testing, comparing, and "modifying the step of predicting success/failure of the subassembly based on results from the step of comparing the actual success or failure with the prediction of the failure." These limitations are not taught or suggested in Suzuki.

Claim 25 (Emphasis Added)

A computer-readable medium having computer-readable program code embodied therein for causing a computer to perform:

obtaining current process data on a subassembly in a manufacturing line during at least one processing stage that is before assembly of the subassembly into a final product;

obtaining historical process data from prior subassemblies processed along the same manufacturing line as the subassembly, the historical process data being from the prior subassemblies while at the at least one processing stage;

predicting, using both the historical process data and the current process data, success/failure of the subassembly if the subassembly is assembled to the final product, wherein the predicting success/failure occurs before assembly of the final product;

assembling the subassembly into the final product;

verifying actual success/failure of the final product; and

modifying performance of the predicting success/failure based on a result from the verifying actual success/failure of the final product.

Claim 25 recites numerous limitations that are not taught or suggested in Suzuki. Some of these limitations are emphasized above.

The dependent claims 26-29 contain numerous limitations not taught or suggested in Suzuki. For example, dependent claim 28 recites predicting a failure for the

subassembly and completing assembly of the subassembly into the final product "even after predicting the failure of the subassembly." These limitations are not taught or suggested in Suzuki.

As another example, claim 29 further recites determining, comparing, and "modifying the step of predicting success/failure of the subassembly based on results from the step of comparing the actual success or failure with the prediction of the failure." These limitations are not taught or suggested in Suzuki.

Claim 30 (Emphasis Added)

A method for predicting success/failure of a final product being processed along a manufacturing line, the method comprising:

processing a subassembly of the final product at different processing stages along the manufacturing line;

evaluating the subassembly at a processing stage, that is before assembly of the subassembly into the final product, to generate current process data;

sending the current process data to a predictor;

obtaining historical process data from prior subassemblies previously processed along the same manufacturing line as the subassembly, the historical process data being obtained from the prior subassemblies while at the processing stage; and

predicting, with the predictor and using both the historical process data and the current process data, success/failure of the subassembly if the subassembly is assembled to the final product, wherein predicting occurs before assembly of the final product.

Claim 30 recites numerous limitations that are not taught or suggested in Suzuki. Some of these limitations are emphasized above.

The dependent claims 31-33 contain numerous limitations not taught or suggested in Suzuki. For example, dependent claims 31 and 32 both recited "modifying the predictor based on accuracy of the step of predicting success/failure."

CONCLUSION

In view of the above, Applicant believes claims 18-33 are in condition for allowance. Allowance of these claims is respectfully requested.

Any inquiry regarding this Amendment and Response should be directed to Philip S. Lyren at Telephone No. (281) 514-8236, Facsimile No. (281) 514-8332. In addition, all correspondence should continue to be directed to the following address:

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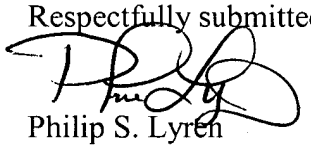
Respectfully submitted,



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CERTIFICATE UNDER 37 C.F.R. 1.8: The undersigned hereby certifies that this paper or papers, as described herein, are being deposited in the United States Postal Service, as first class mail, in an envelope address to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on this 5/19/04 day of May, 2004.

By Be Henry
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